POSY2 Quick Reference

Instrument computer: **posy2.pns.anl.gov** (VAX/VMS)
Username: POSY
Password: *see a member of the POSY2 staff*

Common commands:

newrun set up a new run

start or start 12540-12542 or start 12540,12541,12542

stoprun stop the run and save the data

quitrun stop the run without saving the data

run align run program that aligns the sample

ctl 12540 change control parameters of run 12540

prun control 12540 check control parameters of run 12540

schedule 2(12540)/108000P schedule run 12540 to run for 2 cycles (= 2hours) of 108000 pulses

Looking at data:

typ lh look at data actively being collected (live histogram)

typ fh choose to look at data of a previous run (filed histogram)

runn 12540 specify run 12540 as the data you want to look at

hst x look at data as a function of position channel x on the detector

tpt 1,256 select to look at the sum of time channels 1,256

dis display plot

cvs close plot

hst t look at data as a function of time channel t (time = wavelength)
lambda (Å) = 5.10e-4 * t (microsec)

xpt 20,30 select to look at the sum of position channels 20-30

rdp read number of measured pulses

integrate 1,10 integrate over channels 1-10 as shown in the plot

@clearmem clear the computer memory buffer while a measurement is running (the data will be lost)

ymax or ymin set the min or max value for the y axis.
ysc change the yscale to the newly defined ymax or ymin, or revert back to the auto scaling

dx 10,230 set the x axis min and max to 10 and 230, respectively

prun/live status check status of live run

prun status 12540 check final status of run 12540 (info on # of measured pulses in file, title etc.)

prun header 12540 Get header info out of runfile of run 12540, such as # of measured pulses in file, title, total number of monitor counts, monitor counts per channel, total number of detector counts

dintall if you get the message that a display can't be opened because the "graphics are busy" type this command

Ancillary equipment:

setang change reflection angle

translate change translation of sample perpendicular to beam

angcal check the angle calibration

rdt read temperature

temtur change temperature

Logging in as the instrument account on the LINUX system at the instrument
Username: *posy2* *case sensitive !!!*
Password: *see a member of the POSY2 staff* *case sensitive !!!*

Data analysis: **aragorn.pns.anl.gov**, **boromir.pns.anl.gov** or **gimli.pns.anl.gov** (LINUX)
Username: *your IPNS LINUX Cluster username* *case sensitive !!!*
Password: *your IPNS LINUX Cluster password* *case sensitive !!!*

Run IDL program:
posyidl2

Select POSY2 button

Select menu Data Analysis
Analyze Reflectivity Data

Select menu Data Analysis

Merge Reflectivity Files (automatic merging)
Or Manually Merge Reflectivity Files (manual merging)

Select menu Plotting
Analyzed Data

Select menu Calculation
Layers
Or Reflfit

Also:
Select menu Plotting
Contour (make 2D contour plot of angle vs wavelength or qx vs qz)

Remote login to VAX/VMS computers via LINUX systems:

1) Log into **dasmain.pns.anl.gov** using same username and password as for **gimli.pns.anl.gov**
type: rlogin -l posy posy2 to log into instrument computer **posy2.pns.anl.gov**